

## TABLE OF CONTENTS

## VOLUME 74 (EP), 1989

## MAIN ARTICLES

The electroretinogram in multiple sclerosis and demyelinating optic neuritis (EEG 02127)	1
D. Papakostopoulos, F. Fotiou, J.C. Dean Hart and N.K. Banerji (U.K., Greece)	
Pattern ERG: effects of reference electrode site, stimulus mode and check size (EEG 03651)	11
C.B. Tan, P.J.L. King and K.H. Chiappa (U.S.A.)	
Absence of rate-dependent BAEP P <sub>3</sub> latency changes in patients with definite multiple sclerosis: possible physiological mechanisms (EEG 03578)	19
G.P. Jacobson and C.W. Newman (U.S.A.)	
Influences of transcutaneous electrical stimulation of cutaneous and mixed nerves on subcortical and cortical somatosensory evoked potentials (EEG 02155)	24
A. Nardone and M. Schieppati (Italy)	
Centrifugal and centripetal mechanisms involved in the 'gating' of cortical SEPs during movement (EEG 02131)	36
S.J. Jones, J.-P. Halonen and F. Shawkat (U.K.)	
Improved amplitude evaluation of the frequency following response (FFR) (EEG 02196)	46
H. Dembon, J. Hohnsbein, L. Blanke and M. Falkenstein (F.R.G.)	
Effects of hypothermia on auditory brain-stem and somatosensory evoked responses. A model of a synaptic and axonal lesion (EEG 02220)	50
H. Sohmer, S. Gold, M. Cahani and J. Attias (Israel)	
Event-related covariances during a bimanual visuomotor task. I. Methods and analysis of stimulus- and response-locked data (EEG 03389)	58
A.S. Gevins, S.L. Bressler, N.H. Morgan, B.A. Cutillo, R.M. White, D.S. Greer and J. Illes (U.S.A.)	
Motion onset-offset VEPs in children (EEG 02118)	81
M. De Vries, B. Van Dijk and H. Spekreijse (The Netherlands)	
Short-latency somatosensory evoked potentials following median nerve stimulation in Down's syndrome (EEG 03599)	88
R. Kakigi (Japan)	
Somatosensory evoked potentials elicited by dorsal penile and posterior tibial nerve stimulation (EEG 03545)	95
D.F. Fitzpatrick, S.E. Hendricks, B. Graber, S.E. Balogh and M. Wetzel (U.S.A.)	
The effects of sleep on median nerve short latency somatosensory evoked potentials (EEG 03500)	105
R.O. Addy, D.S. Dinner, H. Lüders, R.P. Lesser, H.H. Morris and E. Wyllie (U.S.A.)	
Scalp topography of somatosensory evoked potentials following electrical stimulation of femoral nerve (EEG 03638)	112
J. Wang, L.G. Cohen and M. Hallett (U.S.A.)	
Binaural interaction of the auditory brain-stem potentials and middle latency auditory evoked potentials in infants and adults (EEG 03655)	124
D.L. McPherson, C. Tures and A. Starr (U.S.A.)	
Effect of noise masking on the brain-stem and middle-latency auditory evoked potentials: central and peripheral components (EEG 03550)	131
P.S. Gott and E.C. Hughes (U.S.A.)	
Pain-related somatosensory evoked potentials following CO <sub>2</sub> laser stimulation in man (EEG 03635)	139
R. Kakigi, H. Shibasaki and A. Ikeda (Japan)	
Event-related covariances during a bimanual visuomotor task. II. Preparation and feedback (EEG 03390)	147
A.S. Gevins, B.A. Cutillo, S.L. Bressler, N.H. Morgan, R.M. White, J. Illes and D.S. Greer (U.S.A.)	
Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man (EEG 02219)	161
J.-P. Halonen, S.J. Jones, M.A. Edgar and A.O. Ransford (U.K.)	
Epidurally recorded cervical spinal activity evoked by electrical and mechanical stimulation in pain patients (EEG 02240)	175
Y.T. Hallström, U. Lindblom, B.A. Meyerson and T.S. Prevec (Sweden, Yugoslavia)	

## TABLE OF CONTENTS

## VOLUME 74 (EP), 1989

## MAIN ARTICLES

The electroretinogram in multiple sclerosis and demyelinating optic neuritis (EEG 02127)	1
D. Papakostopoulos, F. Fotiou, J.C. Dean Hart and N.K. Banerji (U.K., Greece)	
Pattern ERG: effects of reference electrode site, stimulus mode and check size (EEG 03651)	11
C.B. Tan, P.J.L. King and K.H. Chiappa (U.S.A.)	
Absence of rate-dependent BAEP P <sub>3</sub> latency changes in patients with definite multiple sclerosis: possible physiological mechanisms (EEG 03578)	19
G.P. Jacobson and C.W. Newman (U.S.A.)	
Influences of transcutaneous electrical stimulation of cutaneous and mixed nerves on subcortical and cortical somatosensory evoked potentials (EEG 02155)	24
A. Nardone and M. Schieppati (Italy)	
Centrifugal and centripetal mechanisms involved in the 'gating' of cortical SEPs during movement (EEG 02131)	36
S.J. Jones, J.-P. Halonen and F. Shawkat (U.K.)	
Improved amplitude evaluation of the frequency following response (FFR) (EEG 02196)	46
H. Dembon, J. Hohnsbein, L. Blanke and M. Falkenstein (F.R.G.)	
Effects of hypothermia on auditory brain-stem and somatosensory evoked responses. A model of a synaptic and axonal lesion (EEG 02220)	50
H. Sohmer, S. Gold, M. Cahani and J. Attias (Israel)	
Event-related covariances during a bimanual visuomotor task. I. Methods and analysis of stimulus- and response-locked data (EEG 03389)	58
A.S. Gevins, S.L. Bressler, N.H. Morgan, B.A. Cutillo, R.M. White, D.S. Greer and J. Illes (U.S.A.)	
Motion onset-offset VEPs in children (EEG 02118)	81
M. De Vries, B. Van Dijk and H. Spekreijse (The Netherlands)	
Short-latency somatosensory evoked potentials following median nerve stimulation in Down's syndrome (EEG 03599)	88
R. Kakigi (Japan)	
Somatosensory evoked potentials elicited by dorsal penile and posterior tibial nerve stimulation (EEG 03545)	95
D.F. Fitzpatrick, S.E. Hendricks, B. Graber, S.E. Balogh and M. Wetzel (U.S.A.)	
The effects of sleep on median nerve short latency somatosensory evoked potentials (EEG 03500)	105
R.O. Addy, D.S. Dinner, H. Lüders, R.P. Lesser, H.H. Morris and E. Wyllie (U.S.A.)	
Scalp topography of somatosensory evoked potentials following electrical stimulation of femoral nerve (EEG 03638)	112
J. Wang, L.G. Cohen and M. Hallett (U.S.A.)	
Binaural interaction of the auditory brain-stem potentials and middle latency auditory evoked potentials in infants and adults (EEG 03655)	124
D.L. McPherson, C. Tures and A. Starr (U.S.A.)	
Effect of noise masking on the brain-stem and middle-latency auditory evoked potentials: central and peripheral components (EEG 03550)	131
P.S. Gott and E.C. Hughes (U.S.A.)	
Pain-related somatosensory evoked potentials following CO <sub>2</sub> laser stimulation in man (EEG 03635)	139
R. Kakigi, H. Shibasaki and A. Ikeda (Japan)	
Event-related covariances during a bimanual visuomotor task. II. Preparation and feedback (EEG 03390)	147
A.S. Gevins, B.A. Cutillo, S.L. Bressler, N.H. Morgan, R.M. White, J. Illes and D.S. Greer (U.S.A.)	
Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man (EEG 02219)	161
J.-P. Halonen, S.J. Jones, M.A. Edgar and A.O. Ransford (U.K.)	
Epidurally recorded cervical spinal activity evoked by electrical and mechanical stimulation in pain patients (EEG 02240)	175
Y.T. Hallström, U. Lindblom, B.A. Meyerson and T.S. Prevec (Sweden, Yugoslavia)	

Origin and distribution of thalamic somatosensory evoked potentials in humans (EEG 03674)	
T. Morioka, F. Shima, M. Kato and M. Fukui (Japan)	186
Effect of a subdural air collection on the sensory evoked potential during surgery in the sitting position (EEG 02183)	
E. Watanabe, J. Schramm and W. Schneider (F.R.G.)	194
Intracerebral amplitude distributions of the auditory evoked potential (EEG 03677)	
F. Richer, C. Alain, A. Achim, G. Bouvier and J.-M. Saint-Hilaire (Canada)	202
Glucocorticoid influences on the auditory brain-stem responses in man (EEG 02261)	
J. Born, R. Schwab, R. Pietrowsky, P. Pauschinger and H.L. Fehm (F.R.G.)	209
Evoked responses of human auditory cortex may be enhanced by preceding stimuli (EEG 02299)	
N. Loveless, R. Hari, M. Hämäläinen and J. Tiihonen (Finland)	217
Analyses of single-trial N1 amplitude and latency variability and their influence on the average evoked potential (EEG 03633)	
D.G. Thomas, C.M. Neer and J.M. Price (U.S.A.)	228
The relationships among the severity of spinal cord injury, motor and somatosensory evoked potentials and spinal cord blood flow	
M.G. Fehlings, C.H. Tator and R.D. Linden (Canada)	241
Neurophysiological evaluation of central-peripheral sensory and motor pudendal fibres	
R.J. Opsomer, M.D. Caramia, F. Zarola, F. Pesce and P.M. Rossini (Italy)	260
Short latency somatosensory evoked potentials following mechanical taps to the face. Scalp recordings with a non-cephalic reference	
M. Seyal and J.K. Browne (U.S.A.)	271
Abnormalities of short-latency somatosensory evoked potentials in parkinsonian patients	
P.M. Rossini, F. Babiloni, G. Bernardi, L. Cecchi, P.B. Johnson, A. Malentacca, P. Stanzione and A. Urbano (Italy)	277
Early deflections of cerebral magnetic responses to median nerve stimulation	
J. Tiihonen, R. Hari and M. Hämäläinen (Finland)	290
Auditory event-related potentials and brain dysfunction in sleep apnea	
J.A. Walsleben, N.K. Squires and V.L. Rothenberger (U.S.A.)	297
P300 from a passive auditory paradigm	
J. Polich (U.S.A.)	312
Mapping early somatosensory evoked potentials in selective attention: critical evaluation of control conditions used for titrating by difference the cognitive P30, P40, P100 and N140	
J.E. Desmedt and C. Tomberg (Belgium)	321
Mapping somatosensory evoked potentials to finger stimulation at intervals of 450 to 4000 msec and the issue of habituation when assessing early cognitive components	
C. Tomberg, J.E. Desmedt, I. Ozaki, T.H. Nguyen and V. Chalklin (Belgium)	347
New method for titrating differences in scalp topographic patterns in brain evoked potential mapping	
J.E. Desmedt and V. Chalklin (Belgium)	359
Early scalp responses evoked by stimulation of the supraorbital nerve in man	
M. Leandri, C.I. Parodi and E. Favale (Italy)	367
Midlatency auditory evoked responses: differential abnormality of P1 in Alzheimer's disease	
J.S. Buchwald, R.J. Erwin, S. Read, D. Van Lancker and J.L. Cummings (U.S.A.)	378
Comparative effects of age on limbic and scalp P3	
A. Puce, G.A. Donnan and P.F. Bladin (Australia)	385
Focal stimulation of human cerebral cortex with the magnetic coil: a comparison with electrical stimulation	
V.E. Amassian, R.Q. Cracco and P.J. Maccabee (U.S.A.)	401
Comparison of human transcallosal responses evoked by magnetic coil and electrical stimulation	
R.Q. Cracco, V.E. Amassian, P.J. Maccabee and J.B. Cracco (U.S.A.)	417
The relations between long-latency reflexes in hand muscles, somatosensory evoked potentials and transcranial stimulation of motor tracts	
G. Deuschl, A. Ludolph, E. Schenck and C.H. Lücking (F.R.G.)	425
Central motor conduction studies in motor neurone disease using magnetic brain stimulation	
T.N. Schrieffer, C.W. Hess, K.R. Mills and N.M.F. Murray (U.K.)	431
F responses and central motor conduction in multiple sclerosis	
S.J.M. Smith, D. Claus, C.W. Hess, K.R. Mills, N.M.F. Murray and T. Schrieffer (U.K.)	438
Silent periods, long-latency reflexes and cortical MEPs in Huntington's disease and at-risk relatives	
A. Eisen, S. Bohllega, M. Bloch and M. Hayden (Canada)	444
Functional deficits of central sensory and motor pathways in patients with cervical spinal stenosis: a study of SEPs and EMG responses to non-invasive brain stimulation	
H. Masur, C.E. Elger, K. Render, G. Fahrendorf and A.C. Ludolph (F.R.G.)	450

Suppression of visual perception by magnetic coil stimulation of human occipital cortex V.E. Amassian, R.Q. Cracco, P.J. Maccabee, J.B. Cracco, A. Rudell and L. Eberle (U.S.A.)	458
Existence of a strength-duration curve for spinal cord motor evoked potentials in cats P.E. Konrad, L.A. Geddes, W.A. Tacker, Jr., D. Reuter, D. Schooler and S. Dull (U.S.A.)	463
Effects of selective spinal cord lesions on the spinal motor evoked potential (MEP) in the rat J. Adamson, R.A. Zappulla, A. Fraser, J. Ryder and L.I. Malis (U.S.A.)	469

## SHORT COMMUNICATIONS

The pattern reversal VEP in short-gestation infants (EEG 02243) G.F.A. Harding, J. Grose, A. Wilton and J.G. Bissenden (U.K.)	76
Three transverse dipolar generators in the human cervical and lumbo-sacral dorsal horn: evidence from direct intraoperative recordings on the spinal cord surface (EEG 03752) D. Jeanmonod, M. Sindou and F. Mauguère (France)	236
Use of visually evoked responses in evaluation of visual blurring in brain-damaged patients J. Zihl and C. Schmid (F.R.G.)	394
Cross-correlation of the frequency-following response C.W. Palaskas, R.A. Dobie and M.J. Wilson (U.S.A.)	399
Motor evoked potentials with magnetic stimulation: correlations with height N.-S. Chu (Taiwan)	481

## BOOK REVIEW

Non-invasive stimulation of brain and spinal cord. Fundamental and clinical applications edited by P.M. Rossini and C.D. Marsden	486
---	-----

## ANNOUNCEMENT

Two scientific awards in clinical neurophysiology — The M.A.B. BRAZIER Young Investigator Award and The W.A. COBB Young Investigator Award	iii
<i>Index of Authors to Volume 74, 1989</i>	487
<i>Index of Subjects to Volume 74, 1989</i>	491
<i>Table of Contents to Volume 74, 1989</i>	495

